

Proposal for CB3/ConEdison Settlement Fund 2015 Cycle

The Lower East Side Ecology Center is applying for a grant in the amount of \$73,178 to continue its EcoBizNYC and Street Tree Stewardship programs to reduce pollution, actively improve air quality, and work towards improved community health. With the support of Community Board 3, EcoBizNYC will continue to offer its enthusiastically supported and environmentally impactful program, while also leveraging additional community investment to develop technical tools that will facilitate the program's growth. The Street Tree Stewardship Program, coming out of one of its most successful years in regards to participation and impact, is expanding its coordination with the EcoBizNYC program and interns, while also enriching its activities through partnerships with local organizations

EcoBizNYC: The Program in 2014

EcoBizNYC, a program of the Lower East Side Ecology Center (Ecology Center), began in late 2008 with the goal of working with small businesses to reduce their negative impacts on air pollution and the local environment. The program has decreased energy use, increased sustainability, and reduced waste production at nearly 300 small businesses in Community Board 3. In the coming year, the EcoBizNYC program will work with previously enrolled businesses to implement sustainability recommendations made by EcoBizNYC, work to enroll new businesses throughout CB3 with special focus on the Settlement Area, and will continue a focus on connecting businesses with street tree care.

Over the past five years, EcoBizNYC representatives have reached out to more than 1,850 small businesses in Community Board 3, and have pioneered effective tools for reducing small business pollution impacts. EcoBizNYC assessments have been conducted with 278 businesses, and as of writing, 5 more are underway. Based on information gathered during these assessments, we provide recommendations of free and low cost measures that can be implemented to reduce the business' energy use and pollution share.

Some of our tools to reduce air pollution include Con Edison's Small Business Direct Install program (SBDI), which we recommend to every business we reach out to, regardless of their participation or status with the EcoBizNYC program. Through surveys conducted by SBDI contractors, the total average energy reduction potential within EcoBizNYC rated businesses that were assessed between 2009 and 2013 was 7706 kWh, which is equivalent to 5.3 metric tons of CO₂ per business. With an average annual savings of \$1,278 across the 120 businesses we have records for, and an average payback period of less than one month across all businesses, the program has clear benefits to small businesses operating in CB3.

However, we have had continuing difficulty accessing data and follow-up information on these surveys from the frequently-changing Con Edison contractors, and therefore do not

know whether all requested surveys were conducted, whether additional businesses in the EcoBizNYC program have been assessed without our knowledge, nor how many retrofits have actually been completed. Since February 2014, the EcoBizNYC program manager has submitted 18 survey requests directly to Con Edison's SBDI contractor Willdan, to ensure that EcoBizNYC participating businesses receive swift and effective energy surveys and recommendations. Gathering and analyzing quantitative data from these surveys remains a struggle, but we will continue to work with the SBDI contractor to improve data collection and analysis.

In regards to our direct impact on businesses' sustainability implementations, 38 EcoBizNYC rated businesses have received grants of up to \$1,000 to implement sustainable changes such as upgrading to energy-efficient equipment and weatherproofing to reduce energy use. Many of the businesses enrolled in the program have changed a majority of their lighting to energy-efficient CFL or LED bulbs, either on their own or with the assistance of Con Edison's SBDI program.

Our focus on street tree care this year helped engage businesses with trees near their storefronts. In conjunction with the Stewardship Program, we developed street tree stewardship educational material for businesses, and enjoyed a stewardship day on October 9th along a corridor with a particularly strong need for improved street tree care. Leading up to and during the stewardship day, we conducted outreach to involve small businesses, and received positive feedback from those that participated.

Through an increase in businesses' independent efforts and participation in street tree care days, we have seen an amplified interest in monitoring and caring for trees including watering, weeding, planting, and clearing waste. The greatest interest expressed by businesses has been for tree guards, which help to protect trees from people, pets, and other urban impacts. While the NYC Tree Trust will install tree guards throughout much of the Settlement Area, great interest exists in other parts of the neighborhood as well.

The EcoBizNYC program's outreach efforts center on the Settlement Area, with twice the internship hours devoted to this area compared to the rest of the CB3 district. While we continue to grow the program by reaching out to almost all of the businesses in this northeast corner of the Community Board, the number of new enrollments has plateaued at a handful every cycle. We suspect this is the result of full saturation of the program among interested businesses. Additionally, many businesses consistently respond to our outreach with requests for follow up visits from our representatives, because employees are reluctant to make decisions for absent owners and managers.

We are making a particular effort to enroll businesses with Chinese-speaking staff. With the assistance of a Chinese-speaking intern, and in cooperation with the Chinatown BID and AAFE, we translated our EcoBizNYC handout to accurately portray the program and remain culturally sensitive to the interests of Chinese business owners. Our Chinese-speaking intern is also translating the tree stewardship outreach material.

Communication with businesses has been extended through a variety of channels. In addition to in-person communication, which is always most effective but also the most time consuming, we communicate with businesses on Facebook, Twitter, and through a bi-monthly newsletter. All businesses that complete the EcoBizNYC assessment process are awarded a rating, and their participation is promoted with an image and short profile on the EcoBizNYC Facebook page. These businesses are also informed about the variety of additional programs available to them, including Transportation Alternatives' Bike Friendly Business District participation, which has always been popular, MillionTreesNYC's Adopt-A-Tree and Request-A-Tree program, and the New York State Restaurant Association's Green Hospitality Initiative.

The EcoBizNYC program continues to be one-of-a-kind in offering free sustainability consulting to small businesses in NYC. Almost 20% of American energy is consumed by businesses, and with the high volume of small businesses in the Settlement Area, the potential for intervention beyond lighting upgrades remains high.

Similar programs in cities like San Francisco are well integrated into city governance and play an important role in helping cities to meet their energy load and carbon reduction goals. We have always seen the potential of EcoBizNYC to expand beyond the Settlement Area and CB3, but have previously lacked the staff time necessary to build the tools we need to make the program more easily scalable. In 2015, we are continuing the first steps that we took in 2014 to develop the full potential of EcoBizNYC.

EcoBizNYC: The Plan for 2015

The coming year holds the potential to be a transformative year for the program. As we streamline our outreach processes and consolidate our data collection and management techniques, we hope to reach more businesses, communicate our successes, better quantify the positive environmental impacts and maintain our connections more effectively than ever before. In particular, with the help of a data management fellow that is currently participating in the EcoBizNYC internship program, we will consolidate the last five years' worth of data, and leverage resources from the New York State Pollution Prevention Institute community grant to finalize and begin using a brand new, customized data management system that links with a mobile application.

While developing this new system, the EcoBizNYC manager and interns will continue to focus their outreach on the Settlement Area and integrate stewardship of street trees into their outreach. We will encourage small businesses to become involved in the stewardship of street trees, allowing businesses to apply for funding through the EcoBizNYC Sustainability Grants Program to purchase street tree guards.

As a result of our outreach related to street trees in 2014, the EcoBizNYC business owners have become increasingly interested in MillionTreesNYC's Adopt-A-Tree and Request-A-Tree programs over the past year. Another way we address the need for additional air pollution sponges, like street trees, is using our uniquely people-intensive EcoBizNYC internship model to identify impactful locations for additional trees. In

particular, we are always on the lookout for locations along avenues where heavy commercial traffic and nightly trash collection creates especially poor air quality. Focusing on cultivating and expanding green planting along these corridors maximizes potential air quality and quality of life improvement for the community.

The Next Phase for EcoBizNYC: Scaling Up

As we have been moving forward through trial and error with the offerings available to EcoBizNYC businesses, we have realized that we have a deep underlying need for improved data collection, management, and analysis. For the past six months, the EcoBizNYC program manager has been working to develop a relational database to manage program reporting and intern activity, including all visit information, data collection, and assessments. A pending grant application with the New York State Pollution Prevention Institute (NYSP2I)'s 2014-2015 Community Grants Program will provide funding to hire a database expert and mobile application developer to complete the project.

The program is a rich source of data about the energy trends and uses in the Lower East Side neighborhood, and we see the value of continuing to deepen and expand our knowledge of businesses in the area. In the coming year, we will build deeper relationships with enrolled businesses, to understand the best projects they have implemented that reduce energy and enhance sustainability. Through the grant and check-in processes, we catalogue the interests of existing businesses, and have a more concrete idea of the sustainability efforts they have accomplished. Interns will follow up directly with these businesses to facilitate their improvements.

The EcoBizNYC program will move from a spreadsheet-based system to a cloud-based management system. The system will reduce intern training time, eliminate data entry workload, and greatly improve our understanding and ability to quantify and act upon business' impact on the area's air quality and pollution production. This new database will drastically improve program efficiencies, allowing us to administer weekly and monthly reports on the number of visits conducted, participating business information, program participation including details about street tree care, as well as energy load reduction data.

By utilizing a database for program management, our ability to provide targeted, effective, and timely outreach to businesses will be greatly improved. Within the next year, interns will transition to using refurbished iPads from our very own e-waste reuse program for data collection and updating. This mobile application will allow interns to use their time more efficiently, and will give business owners a fast and easy way to review their program status, log sustainability activity, or request a visit.

With a data management system and corresponding mobile application, EcoBizNYC will be a scalable model program in New York City that is easy and appealing, offering quantifiable and reportable sustainability improvements. As a hybrid of in-person and digital outreach and project management, EcoBizNYC stands to offer the CB3 area

quantifiable evidence of the success of innovative green commercial practices, which will enable the EcoBizNYC program and its individual participants to leverage further support and funding from environmentally minded individuals and entities.

Street Tree Stewardship Successes

Our street tree program grew out of a local need for greater and wider care of street trees in CB3. In 2014, we have continued our valuable training and volunteer days, while looking to expand our educational opportunities for local students and business owners. This past year, we offered 7 community stewardship days for 172 tree stewards, 11 summer internships, and applied 6000 pounds of compost.

Over the past four years, the Lower East Side Ecology Center's Street Tree Stewardship Program worked with the NYC Parks Department and the NYC Tree Trust to plant and care for over 240 street trees near the Con Edison Plant. Street trees are a valuable asset to any area, and in our community the trees are helping to capture air pollution and greenhouse gases from the electricity plant, reduce air pollution by lessening demand for energy to heat and cool buildings, absorb storm water, and create shade and wildlife habitat. The trees also are a way to beautify the neighborhood and provide quality-of-life benefits.

Due to the benefits that street trees bring to communities, the Stewardship Program has attracted support from many of our EcoBizNYC enrolled businesses. A great example of this kind of collaborative stewardship was during our October 9th EcoBizNYC stewardship day, when a number of business owners and employees participated in a tree care event. These owners have received information and literature about street tree care from EcoBizNYC representatives, and understand the importance of investing resources in stewarding the existing greenery in our community.

Support for the Stewardship Program is broader than local business, as well, attracting support from community groups and city agencies including: NYCHA Riis and Campos Plaza Community Centers, NYCHA Gardening and Greening, LES Girls Club, TreeKit, Two Bridges Neighborhood Council, NYC Parks Department, LES Waterfront Alliance, Transportation Alternatives, GOLES, MillionTreesNYC and TreesNY. Additionally, the Ecology Center has matched these stewardship efforts with the contribution of staff time and locally produced compost through the NYC Compost Project.

Street Tree Stewardship Going Forward

Continuing on our past work with the Street Tree Stewardship Program, we will work with the Parks Department and the NYC Tree Trust in the spring and fall of 2015 to plant additional trees in an expanded radius around the Con Edison plant. Parks and NYC Tree Trust will be responsible for new tree planting, expanded tree bed construction, and procurement of tree guards, while we coordinate community participation to provide extended tree stewardship and training. We also plan to assist the Tree Trust with their

outreach to NYCHA and Community Gardens to help them receive new and replacement trees and make sure these trees are cared for.

Over the last 4 years, more than 240 new street trees were planted in our community, and the Ecology Center is uniquely positioned to continue stewardship for this resource. Tree mortality is the highest in the first three years after planting, and continued monitoring of the newly planted trees will ensure that they will get replaced free of charge by the contractor, who is required to replace dead trees for two years after initial planting. However, tree mortality needs to be reported to Parks to ensure that replacement will happen. We have built up a strong cohort of community volunteers that participate in street tree stewardship events year round, and are confident that we will only increase the number of tree stewards in our community. Additionally, 2015 is an NYC Tree Census year, and our corps of tree stewards will be instrumental in helping assess the health of the urban forest in our community.

The Street Tree Internship program will also continue to be successful with high school students who are able to provide water and stewardship for the trees during the summer when it is most important. For the past three summers, we were permitted by the NYC DEP to use fire hydrants to facilitate watering trees and we anticipate being able to renew the permit for 2015. The internship program not only provides benefits to the street trees, but also gives local youth opportunities to improve the quality of life in their community.

The NYC Compost Project in Manhattan, a program funded by the Department of Sanitation and housed at the Ecology Center, will continue to provide free compost and mulch for the stewardship program. Additionally, Ariana Arancibia, one of our compost coordinators, will work with Dan Tainow, our Education Director, in the planning and implementation of all stewardship activities. Moreover, coordination between our interrelated EcoBizNYC program and the Street Tree Stewardship Program continues to grow as we engage more enrolled businesses in street tree care days, encourage and educate business employees to care for adjacent street trees, and provide them with the materials they need to conduct street tree care. As we head into 2015, we will prioritize the stewardship of these greatly effective pollution sponges as an essential infrastructure for our community.

Timeline

January – March 2015

EcoBizNYC:

- Recruit and train four to six Spring interns to engage new businesses, check-in with currently participating businesses, and begin the transition to the new data management system

Street Tree Stewardship Program

- Plan spring stewardship days with community groups

April – May 2015

EcoBizNYC:

- Continue Spring 2015 semester

Street Tree Stewardship Program

- Hold 4 spring stewardship days with community groups and NY Tree Trust to plant groundcover and reapply mulch in the newly expanded and guarded tree beds

May – August 2015

EcoBizNYC:

- Recruit and train three to five summer interns to engage new businesses and check-in with currently participating businesses
- Troubleshoot new data management system with interns as test subjects
- Hold street tree care days with the goal of having EcoBizNYC businesses participate
- Award street tree-focused Sustainability Grants (continuous)

Street Tree Stewardship Program

- Recruit, train and work with 10 Street Tree Interns to water, compost, mulch and clean up existing tree beds

September – December 2015

EcoBizNYC:

- Recruit and train four to six Fall interns to engage new businesses and check-in with currently participating businesses
- Begin to roll out free EcoBizNYC mobile application to participating business owners
- Hold street tree care days with the goal of having EcoBizNYC businesses participate
- Award street tree-focused Sustainability Grants (continuous)

Street Tree Stewardship Program

- Hold 4 spring stewardship days with community groups and NY Tree Trust to plant groundcover and reapply mulch in the newly expanded and guarded tree beds

January – March 2016

EcoBizNYC:

- Recruit and train four to six Spring interns to engage new businesses and check-in with currently participating businesses
- Provide full report on the cumulative benefit of improved data management on business outreach and participation
- Prepare report for Community Board 3 on project activities

Street Tree Stewardship Program

- Plan spring stewardship days with community groups

Staff

Meredith Danberg-Ficarelli is the EcoBizNYC Program Manager. Her previous experience in small business sustainable waste management development and consulting prepared her well for the intricacies of outreach and collaboration with small businesses in CB3. She is also the Marketing Director at the Ecology Center, and is placing a renewed effort on giving businesses deserved visibility for participating in the EcoBizNYC program.

Daniel Tainow has been the Education Director at the Lower East Side Ecology Center for the past four years. Dan has a strong background in environmental education and natural resource conservation, having led educational workshops and greening workdays for all ages. He is also a NYC Department of Parks and Recreation Citizen Pruner, and will continue to develop and implement the Street Tree Stewardship Program.

In addition, **Christine Datz-Romero**, the Executive Director of the Ecology Center, continues to be involved in the management of the program.

Lower East Side Ecology Center Budget 2015

Revenue	
Corporations	189,000
Foundations	163,000
Government	546,745
Earned Income	200,000
Other	123,500
Total Revenue	\$ 1,222,245
Expenses	
Administrative Staff	655,000
Professional Services	30,000
Development	12,000
Community Composting	25,000
New York City Compost Pro	97,000
Environmental Education	10,500
Electronic Waste Recycling	300,000
Stewardship/East River Par	25,000
Vehicle Maintenance	25,000
Utilities/Insurance/Etc.	40,735
Total Expenses	\$ 1,220,235

Community Board 3 Con Edison Settlement Funding Request 2015

Lower East Side Ecology Center

Personnel		
EcoBiz Project Manager	20 hrs @ \$25/hr 52 weeks	26,000
Stewardship Program Coordinator	25% of Dan Tainow time for 8 months	9,160
Subtotal		35,160
Fringe Benefits @ 30%		10,548
Total Personnel		45,708
OTPS		
Printing & Marketing	Rack cards, stickers, signage	500
Sustainability Grants	10 grants of up to \$800	7,000
Stipends for EcoBiz Interns	15 college interns @ \$475	7,125
Stipends for Stewardship Interns	15 high school interns @ \$200	3,000
Supplies	Water conservation kits, light bulb samples	300
Total OTPS		17,925
Personnel & OTPS		63,633
Administrative Overhead @ 15%		9,545
In-Kind		
Database Development		15,000
Compost Coordinator	20% of Compost Project staff	8,200
Refurbished iPads		400
Materials for Street Tree Stewardship	compost, mulch, tools, transportation	5,000
Total In-Kind		28,600
Total Project Cost		\$101,778
Request from CB 3		\$73,178